

Air Monitoring Summary Tables: Evacuation Zone

The tables below summarize preliminary air monitoring data collected using EPA AreaRAE Pro, DustTrak DRX, Handheld DustTrak, SPM Flex, and MultiRAE Pro instruments.

Project Name: Rockton Chemtool Fire ER
Date/Time: 06/17/21 03:00 to 06/18/21 01:53

Weather
Temperature: 57.2°, high of 93.2°
Wind Speed: 6 - 16 miles per hour
Wind Direction: South/Southwest
Conditions: Mostly Cloudy

Station 1: Roscoe Middle School						
Instrument	Analyte	Chemtool Public Health Screening Level ¹	Public Health Screening Level Exceeded?	Number of 1-Hour Periods	1-Hour Period Concentration Range	Average of All 1-Hour Periods
DustTrak 206	PM _{2.5} (mg/m ³)	0.025 mg/m ³	No	15	0.008 to 0.012	0.010
	PM ₁₀ (mg/m ³)	0.05 mg/m ³	No	15	0.010 to 0.016	0.012
AreaRAE 2 (S/N: 0641)	VOC (ppm)	1 ppm	No	13	0.5 to 0.7	0.6
	CO (ppm)	--	No	13	0.0 to 0.0	0.0
	O ₂ (%)	--	No	13	21.4 to 21.7	21.5
	H ₂ S (ppm)	0.1 mg/m ³	No	13	0.0 to 0.0	0.0

Station 4: Corner of Union and Ferry						
Instrument	Analyte	Chemtool Public Health Screening Level ¹	Public Health Screening Level Exceeded?	Number of 1-Hour Periods	1-Hour Period Concentration Range	Average of All 1-Hour Periods
DustTrak 200	PM _{2.5} (mg/m ³)	0.025 mg/m ³	No	21	0.002 to 0.012	0.007
	PM ₁₀ (mg/m ³)	0.05 mg/m ³	No	21	0.003 to 0.012	0.008
AreaRAE 2 (S/N: 2172)	VOC (ppm)	1 ppm	No	22	0.0 to 35.7	0.0
	CO (ppm)	--	No	22	0.0 to 1.5	0.1
	O ₂ (%)	--	No	22	20.2 to 20.9	20.5
	H ₂ S (ppm)	0.1 mg/m ³	No	22	0.0 to 0.0	0.0

Station 5: Stand alone area near stop sign on Chapel and Bridge St						
Instrument	Analyte	Chemtool Public Health Screening Level ¹	Public Health Screening Level Exceeded?	Number of 1-Hour Periods	1-Hour Period Concentration Range	Average of All 1-Hour Periods
AreaRAE 2 (S/N: 0640)	VOC (ppm)	1 ppm	No	21	0.0 to 1.9	0.0
	CO (ppm)	--	No	21	0.0 to 0.0	0.0
	O ₂ (%)	--	No	21	20.3 to 20.9	20.7
	H ₂ S (ppm)	0.1 mg/m ³	No	21	0.0 to 0.0	0.0

Station 6: Corner of Union and Ferry						
Instrument	Analyte	Chemtool Public Health Screening Level ¹	Public Health Screening Level Exceeded?	Number of 1-Hour Periods	1-Hour Period Concentration Range	Average of All 1-Hour Periods
DustTrak 212	PM _{2.5} (mg/m ³)	0.025 mg/m ³	No	21	0.003 to 0.018	0.008
	PM ₁₀ (mg/m ³)	0.05 mg/m ³	No	21	0.004 to 0.020	0.009
AreaRAE 2 (S/N: 0643)	VOC (ppm)	1 ppm	No	21	0.0 to 1.0	0.0
	CO (ppm)	--	No	21	0.0 to 0.0	0.0
	O ₂ (%)	--	No	21	20.2 to 21.3	20.8
	H ₂ S (ppm)	0.1 mg/m ³	No	21	0.0 to 0.0	0.0

Comments						
Air monitoring measurements have been averaged over a 1-hour time period and summarized above.						
Start and stop times for each air monitoring instrument varies. The monitoring period is based on the earliest start time and latest stop time out of all units.						
Air monitoring at fixed locations stopped at 6/18/2021 01:53 due to inclement weather conditions.						
1 - Chemtool Public Health Screening Levels are based on 1-hour time-weighted averages and were established by ATSDR						

Notes:
 CO - Carbon Monoxide
 H₂S - Hydrogen Sulfide
 O₂ - Oxygen
 ppm - Parts per million
 VOC - Volatile organic compounds

Air Monitoring Summary Tables: Evacuation Zone

The tables below summarize preliminary air monitoring data collected using EPA Handheld DustTrak, SPM Flex, and MultiRAE Pro instruments.

Project Name: Rockton Chemtool Fire ER
Date/Time: 06/15/21 19:00 to 06/18/21 06:25

Station EZ-01: 1101-1159 Innovation Dr					
Instrument	Analyte	Chemtool Public Health Screening Level ¹	Public Health Screening Level Exceeded?	Number of Measurements	Concentration Range
MultiRAE Pro	H ₂ S (ppm)	0.1 ppm	No	30	0.0 to 0.0
	HCN	1 ppm	No	30	0.0 to 0.3
	VOC (ppm)	1 ppm	No	30	0.0 to .01
Handheld DustTrak	PM _{2.5} (mg/m ³)	0.025 mg/m ³	Yes	5	0.013 to 0.148
	PM ₁₀ (mg/m ³)	0.05 mg/m ³	No	5	0.022 to 0.040
SPM Flex	SO ₂ (ppb)	0.2 ppm	No	28	0.0 to 0.0

Station EZ-02: 100-198 Kothe Ct					
Instrument	Analyte	Chemtool Public Health Screening Level ¹	Public Health Screening Level Exceeded?	Number of Measurements	Concentration Range
MultiRAE Pro	H ₂ S (ppm)	0.1 ppm	No	10	0.0 to 0.0
	HCN	1 ppm	No	10	0.0 to 0.3
	VOC (ppm)	1 ppm	No	10	0.0 to 0.0
Handheld DustTrak	PM _{2.5} (mg/m ³)	0.025 mg/m ³	--	0	--
	PM ₁₀ (mg/m ³)	0.05 mg/m ³	--	0	--
SPM Flex	SO ₂ (ppb)	0.2 ppm	No	10	0.0 to 0.0

Station EZ-03: 860-998 N Prairie St					
Instrument	Analyte	Chemtool Public Health Screening Level ¹	Public Health Screening Level Exceeded?	Number of Measurements	Concentration Range
MultiRAE Pro	H ₂ S (ppm)	0.1 ppm	No	25	0.0 to 0.0
	HCN	1 ppm	No	26	0.0 to 0.5
	VOC (ppm)	1 ppm	No	25	0.0 to 0.0
Handheld DustTrak	PM _{2.5} (mg/m ³)	0.025 mg/m ³	No	4	0.006 to 0.015
	PM ₁₀ (mg/m ³)	0.05 mg/m ³	No	6	0.008 to 0.020
SPM Flex	SO ₂ (ppb)	0.2 ppm	No	24	0.0 to 0.01

Station EZ-04: 100-198 E Franklin St					
Instrument	Analyte	Chemtool Public Health Screening Level ¹	Public Health Screening Level Exceeded?	Number of Measurements	Concentration Range
MultiRAE Pro	H ₂ S (ppm)	0.1 ppm	No	6	0.0 to 0.0
	HCN	1 ppm	No	6	0.0 to 0.3
	VOC (ppm)	1 ppm	No	6	0.0 to 0.0
Handheld DustTrak	PM _{2.5} (mg/m ³)	0.025 mg/m ³	--	0	--
	PM ₁₀ (mg/m ³)	0.05 mg/m ³	--	0	--
SPM Flex	SO ₂ (ppb)	0.2 ppm	No	6	0.0 to 0.0

Comments
Air monitoring measurements have been averaged over a 1-hour time period and summarized above.
Start and stop times for each air monitoring instrument varies. The monitoring period is based on the earliest start time and latest stop time out of all units.
1 - Chemtool Public Health Screening Levels are based on 1-hour time-weighted averages and were established by ATSDR

Notes:

CO - Carbon Monoxide
H₂S - Hydrogen Sulfide
O₂ - Oxygen
ppm - Parts per million
VOC - Volatile organic compounds

Air Monitoring Summary Tables: Evacuation Zone

The tables below summarize preliminary air monitoring data collected using EPA Handheld DustTrak, SPM Flex, and MultiRAE Pro instruments.

Project Name: Rockton Chemtool Fire ER
Date/Time: 06/15/21 19:00 to 06/18/21 06:25

Station EZ-05: 907-1099 Watts Ave					
Instrument	Analyte	Chemtool Public Health Screening Level ¹	Public Health Screening Level Exceeded?	Number of Measurements	Concentration Range
MultiRAE Pro	H ₂ S (ppm)	0.1 ppm	No	24	0.0 to 0.0
	HCN	1 ppm	No	25	0.0 to 0.3
	VOC (ppm)	1 ppm	No	25	0.0 to 0.0
Handheld DustTrak	PM _{2.5} (mg/m ³)	0.025 mg/m ³	No	5	0.006 to 0.015
	PM ₁₀ (mg/m ³)	0.05 mg/m ³	No	5	0.007 to 0.030
SPM Flex	SO ₂ (ppb)	0.2 ppm	No	25	0.0 to 0.0

Station EZ-06: 14632 S Bluff Rd					
Instrument	Analyte	Chemtool Public Health Screening Level ¹	Public Health Screening Level Exceeded?	Number of Measurements	Concentration Range
MultiRAE Pro	H ₂ S (ppm)	0.1 ppm	No	24	0.0 to 0.0
	HCN	1 ppm	No	25	0.0 to 0.3
	VOC (ppm)	1 ppm	No	24	0.0 to 0.0
Handheld DustTrak	PM _{2.5} (mg/m ³)	0.025 mg/m ³	No	5	0.007 to 0.055
	PM ₁₀ (mg/m ³)	0.05 mg/m ³	No	5	0.008 to 0.030
SPM Flex	SO ₂ (ppb)	0.2 ppm	No	24	0.0 to 0.01

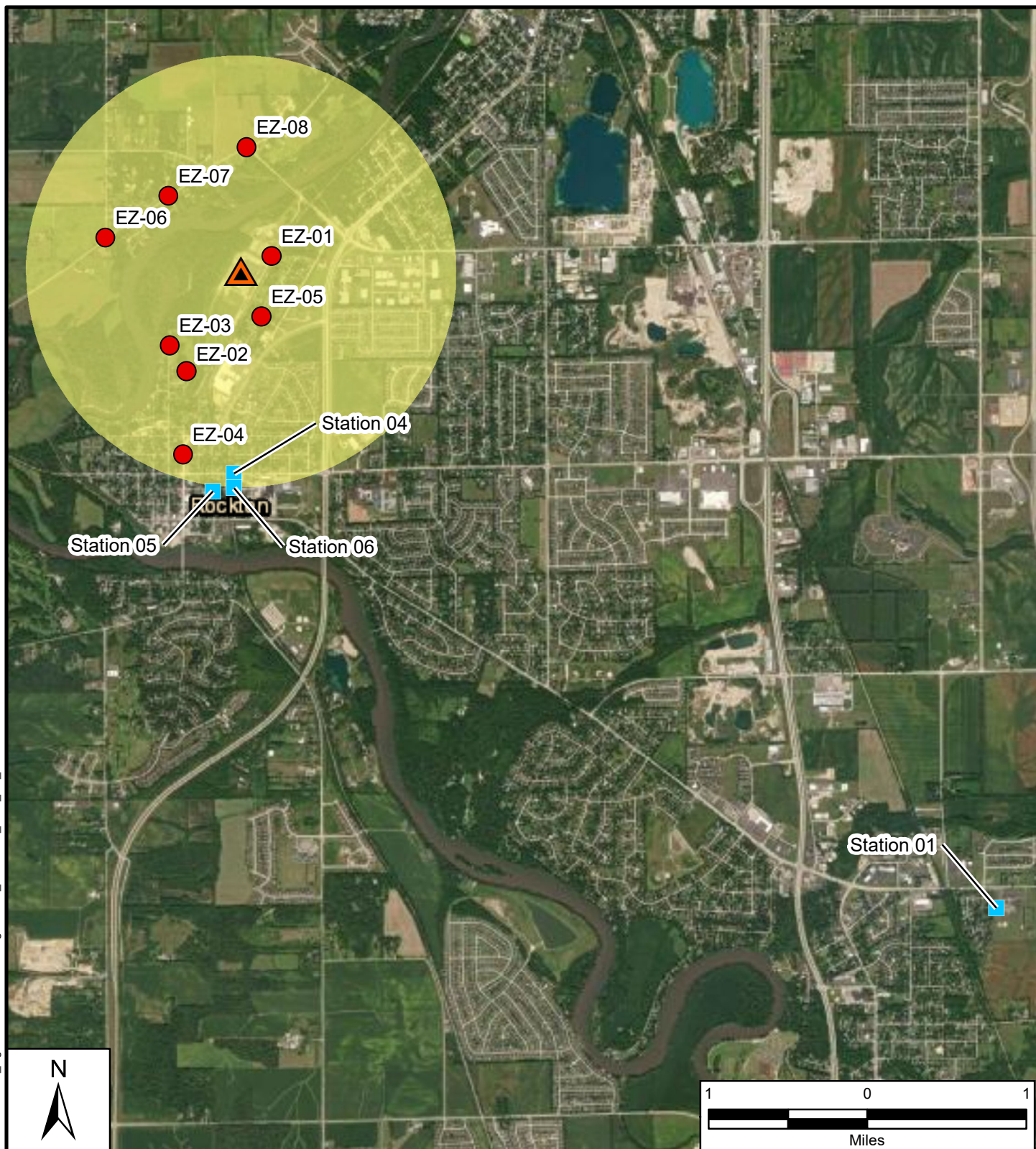
Station EZ-07: 14728-14758 S Bluff Rd					
Instrument	Analyte	Chemtool Public Health Screening Level ¹	Public Health Screening Level Exceeded?	Number of Measurements	Concentration Range
MultiRAE Pro	H ₂ S (ppm)	0.1 ppm	No	15	0.0 to 0.0
	HCN	1 ppm	No	15	0.0 to 0.0
	VOC (ppm)	1 ppm	No	15	0.0 to 0.0
Handheld DustTrak	PM _{2.5} (mg/m ³)	0.025 mg/m ³	No	5	0.005 to 0.024
	PM ₁₀ (mg/m ³)	0.05 mg/m ³	No	5	0.005 to 0.030
SPM Flex	SO ₂ (ppb)	0.2 ppm	No	15	0.0 to 0.0

Station EZ-08: 1001-1199 Prairie Hill Rd					
Instrument	Analyte	Chemtool Public Health Screening Level ¹	Public Health Screening Level Exceeded?	Number of Measurements	Concentration Range
MultiRAE Pro	H ₂ S (ppm)	0.1 ppm	No	14	0.0 to 0.0
	HCN	1 ppm	No	14	0.0 to 0.0
	VOC (ppm)	1 ppm	No	14	0.0 to 0.0
Handheld DustTrak	PM _{2.5} (mg/m ³)	0.025 mg/m ³	Yes	4	0.007 to 0.075
	PM ₁₀ (mg/m ³)	0.05 mg/m ³	Yes	4	0.008 to 0.085
SPM Flex	SO ₂ (ppb)	0.2 ppm	No	14	0.0 to 0.0

Comments
1 - Chemtool Public Health Screening Levels are based on 1-hour time-weighted averages and were established by ATSDR

Notes:

H₂S - Hydrogen Sulfide
 HCN - Hydrogen Cyanide
 mg/m³ - milligrams per cubic meter
 O₂ - Oxygen
 ppm - Parts per million
 PM_{2.5} - particles that are 2.5 micrometers and smaller
 PM₁₀ - particles that are 10 micrometers and smaller
 SO₂ - Sulfur Dioxide
 VOC - Volatile organic compounds



Legend

- Evacuation Zone Monitoring Locations
- ▲ Fire Location
- EPA Air Monitoring Station
- 1 Mile Evacuation Radius

Note: Monitoring station locations subject to change based on weather and operational objectives

Rockton Chemtool Fire ER
Rockton, IL

Figure 1
Air Monitoring Stations
06/17/2021 03:00 - 06/18/2021 02:00



Prepared For: USEPA

Prepared By: Tetra Tech Inc.